IL 174-40

157702

QUALITY ASSURANCE NOTICE

RECEIVED OCT 2 5 1983

CC# 5812

Due to magnetic tape failure the library searches for FSCC scans # 1433 and # 1154 are not available.

Quality Assurance Analyst

CASE SUMMARY -- CASE #1887

The following Quality Assurance Notices apply to Case #1887:

QUALITY ASSURANCE NOTICE

Semivolatile sample $\neq 500$ required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "EDL."

Bob Whitehead Quality Assurance Specialist

QUALITY ASSURANCE NOTICE CC#5801- volatile

Due to background interference in this sample some of the surrogate recoveries are outside the control limits.

quality Assurance Analysi

RECEIVED 00: 2 5 1983

tatio	The statements checked below apply to the pesticide fraction of sample SC/ . These statements apply to problems incurred with the quantion of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples) flagged by an asterisk (*) on the compound list.	
	No DBC recovery available due to a dilution factor. No spike recovery available due to a dilution factor. No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these	
	Compounds. No DBC recovery due to severe matrix interference. Variations between duplicate samples due to non-homogenous nature of	
	No DBC recovery due to <u>recovery</u> dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle). Low/high (circle) spike recoveries due to matrix interference.	
	Additional Analyst/Quality Assurance Specialist comments:	
init	ials <u>Ki</u>	
date	1-27 83	

tatio	The statements checked below apply to the pesticide fraction of sample see. These statements apply to problems incurred with the quantion of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples) flagged by an asterisk (*) on the compound list.
	No DBC recovery available due to a dilution factor.
	No spike recovery available due to a dilution factor.
	No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
	No DBC recovery due to severe matrix interference.
	Variations between duplicate samples due to non-homogenous nature of soil sample.
·	No DBC recovery due to wcc://wcc://wcc.//wcc.///wcc.///wcc.///wcc.///wcc.///wcc.///wcc.///wcc.///wcc.///wcc.
	Low/high (circle) spike recoveries due to matrix interference.
	Additional Analyst/Quality Assurance Specialist comments:
	ials
date	- 1/2753 RECEIVED OCT 2 5 1983

QUALITY ASSURANCE NOTICE

Semivolatile sample #5662 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "EDL."

Bob Whitehead
Caco 1887
Tity Assurance Specialist

Semivolatile sample # 5803 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead Quality Assurance Specialist

QUALITY ASSURANCE NOTICE

The surrogate recoveries for the volatile portion of this sample are outside the quality control limits. However, due to insufficient sample remaining, re-analysis could not be performed. The original data is therefore reported.

ity Assurange Analyst

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QUALITY ASSURANCE NOTICE

Due to insufficient sample remaining, the dry weight portion of this sample was not analyzed.

Quality Assurance Analyst

The statements checked below apply to the pesticide fraction of sample # 5803 . These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (*) on the compound list. No DBC recovery available due to a _____ dilution factor. No spike recovery available due to a _____ dilution factor. No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds. No DBC recovery due to severe matrix interference. Variations between duplicate samples due to non-homogenous nature of soil sample. No DBC recovery due to dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle). Low/high (circle) spike recoveries due to matrix interference. Additional Analyst/Quality Assurance Specialist comments: initials &

Due to insufficient sample remaining, the <u>dry weight</u> portion of this sample was not analyzed.

Quality Assurance Analyst

QUALITY ASSURANCE NOTICE

Due to insufficient sample remaining, the pesticide portion of this sample was not analyzed.

Quality Assurance Analyst

QUALITY ASSURANCE NOTICE

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The surrogate recoveries for the semi-volatile portion of this sample are outside the quality control limits. However, due to insufficient sample remaining, re-analysis could not be performed. The original data is therefore reported.

Cac 1887 Laters

tati	The statements checked below apply to the pesticide fraction of sample $\underline{\mathcal{ECS}}$. These statements apply to problems incurred with the quantion of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples) flagged by an asterisk (*) on the compound list.		
	No DBC recovery available due to a dilution factor.		
	No spike recovery available due to a dilution factor.		
	No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.		
	No DBC recovery due to severe matrix interference.		
	Variations between duplicate samples due to non-homogenous nature of soil sample.		
	No DBC recovery due to $\frac{2C!}{}$ dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).		
	Low/high (circle) spike recoveries due to matrix interference.		
	Additional Analyst/Quality Assurance Specialist comments:		
init	ials set		

date <u>9-27-83</u>

Semivolatile sample # 5808 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead Quality Assurance Specialist

QUALITY ASSURANCE NOTICE

Wolatile sample # 5808 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead Quality Assurance Specialist

RECEIVED OCT 2 5 1983

Cax 1887

tati	The statements checked below apply to the pesticide fraction of sample scs . These statements apply to problems incurred with the quantion of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples) flagged by an asterisk (*) on the compound list.
	No DBC recovery available due to a dilution factor.
	No spike recovery available due to a dilution factor.
	No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
	No DBC recovery due to severe matrix interference.
	Variations between duplicate samples due to non-homogenous nature of soil sample.
	No DBC recovery due to dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
	Low/high (circle) spike recoveries due to matrix interference.
	Additional Analyst/Quality Assurance Specialist comments:
init	ials
date	9/27/83

Semivolatile sample # 5809 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead Quality Assurance Specialist

QUALITY ASSURANCE NOTICE

Volatile sample # 5809 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead Quality Assurance Specialist

tati	The statements checked below apply to the pesticide fraction of sample SEG . These statements apply to problems incurred with the quantion of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples) flagged by an asterisk (*) on the compound list.		
	No DBC recovery available due to a dilution factor.		
	No spike recovery available due to a dilution factor.		
	No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.		
	No DBC recovery due to severe matrix interference.		
	Variations between duplicate samples due to non-homogenous nature of soil sample.		
	No DBC recovery due to dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).		
	Low/high (circle) spike recoveries due to matrix interference.		
	Additional Analyst/Quality Assurance Specialist comments:		
	ials		
data	and the second of the second o		

tatio	The statements checked below apply to the pesticide fraction of sample S/C . These statements apply to problems incurred with the quantion of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples) flagged by an asterisk (*) on the compound list.
	No DBC recovery available due to a dilution factor. No spike recovery available due to a dilution factor. No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these
	Compounds. No DBC recovery due to severe matrix interference. Variations between duplicate samples due to non-homogenous nature of soil sample.
	No DBC recovery due to dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
	Low/high (circle) spike recoveries due to matrix interference. Additional Analyst/Quality Assurance Specialist comments:
	ials <u>Sif</u>

tati	The statements checked below apply to the pesticide fraction of sample . These statements apply to problems incurred with the quantion of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples) flagged by an asterisk (*) on the compound list.
	No DBC recovery available due to a dilution factor. No spike recovery available due to a dilution factor. No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
	No DBC recovery due to severe matrix interference. Variations between duplicate samples due to non-homogenous nature of soil sample. No DBC recovery due to dilution factor on packed/capillary
	(circle) and matrix interference on packed/capillary columns (circle). Low/high (circle) spike recoveries due to matrix interference. Additional Analyst/Quality Assurance Specialist comments:
init	ials <u>xid</u>
	<u></u>

tati	The statements checked below apply to the pesticide fraction of sample $58/2$. These statements apply to problems incurred with the quantion of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples) flagged by an asterisk (*) on the compound list.	
	No DBC recovery available due to a dilution factor.	
	No spike recovery available due to a dilution factor.	
	No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.	
	No DBC recovery due to severe matrix interference.	
	Variations between duplicate samples due to non-homogenous nature of soil sample. $\widehat{}$	
	No DBC recovery due to (circle) and matrix interference on packed/capillary columns (circle).	
	Low/high (circle) spike recoveries due to matrix interference.	
	Additional Analyst/Quality Assurance Specialist comments:	
init	ials <u>st</u>	
date	9/27/83	

tatio	The statements checked below apply to the pesticide fraction of sample \leq / \geq . These statements apply to problems incurred with the quantion of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples) flagged by an asterisk (*) on the compound list.
	No DBC recovery available due to a dilution factor.
	No spike recovery available due to a dilution factor.
	No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
	No DBC recovery due to severe matrix interference.
	Variations between duplicate samples due to non-homogenous nature of soil sample.
	No DBC recovery due to <a>(circle) and matrix interference on packed/capillary columns (circle).
	Low/high (circle) spike recoveries due to matrix interference.
	Additional Analyst/Quality Assurance Specialist comments:
initi	ials <u>Ab</u>
	9/2-1.2
	RECEIVED OCT 2 5 1983

Semivolatile sample $\frac{4}{58/4}$ required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "EDL."

Bob Whitehead Quality Assurance Specialist

QUALITY ASSURANCE NOTICE CASE# 1887

fraction of this sample, CC# 58/4, EPA# E3797, no surrogate recovery data is available.

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Quality Assurance Analyst

	No spike recovery available due to a dilution factor.		
	No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.		
	No DBC recovery due to severe matrix interference.		
	Variations between duplicate samples due to non-homogenous nature of soil sample.		
	No DBC recovery due to dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).		
	Low/high (circle) spike recoveries due to matrix interference.		
Additional Analyst/Quality Assurance Specialist comments:			
init	ials		

date $\frac{9/27/83}{}$

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Semivolatile sample $\pm \underline{58/5}$ required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead Quality Assurance Specialist

QUALITY ASSURANCE NOTICE CC #5815

Due to insufficient sample remaining, the <u>dry weight</u> portion of this sample was not analyzed.

Quality Assurance Analyst

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QUALITY ASSURANCE NOTICE

Volatile sample #58/5 required a substantial dilution in order to accurately detect and quantify compounds present at high levels. Because of this dilution factor, the level of surrogates in this sample fell below the detection limit, and are therefore reported as "BDL."

Bob Whitehead Quality Assurance Specialist

CC#5815

The following notice regards CompuChem's current policies concerning the evaluation of TCDD data. Any blanks with surrogate recoveries outside control limits will also be affected by these policies.

(1) We are committed to rerun TCDD fractions if the recovery of the 1.2.3.4 TCDD surrogate drops below contract mandated levels.

Soils 11-1287

Maters 26-104%

- (2) If a TCDD rerun is required on a specific sample, the preparation process will start:
 - (a) With a split of the base neutral extract if B/N surrogate recoveries are within contract specified limits.
 - (b) With a re-extraction of the original sample if the B/N surrogates are outside of contract specified levels. If the TCDD fraction preceds the SY fraction through the system, a re-prep should be scheduled due to the low probability of a B/N surrogate failure. If the B/N fraction is then later determined to have bad surrogate recoveries, a full re-extraction can then be performed.
- (3) If a TCDD blank has bad recoveries, the following rules will apply:

 (a) All samples associated with the blank will be run, surrogate recoveries determined and the amount of native TCDD, if any,
 - (b) If the sample has surrogate recovery within contract specifications and does not have any mative material present, it will be reported out with the appropriate QC notice.
 - (c) If, however, either surrogate recovery is out of the acceptable range or native TCDD is identified, the sample must be reprocessed based on the rules identified in point 2.
- (4) If native TCDD is found in the blank the entire batch must be reextracted.
- (5) Based on the rules defined in Point 2, if a group of samples are going to be reprepared from the base/neutral fraction, a new blank will be required. A CompuChem number for this blank can be obtained by using the the number 180 QC counter on the HP3000 system; a 1:20 insertion rate is required. This blank should start with 250 microliters of methylene chloride and follow all of the reprep steps.
- (6) If the second TCDD also fails to produce acceptable results we will invoice the EPA for the re-analysis of a full pesticide/ TCDD fraction.

RECEIVED OCT 2 5 1983

Paul Mills Paul Mills Director, Quality Assurance

CAMILOUT

The statements checked below apply to the pesticide fraction of sample # 58.5. These statements apply to problems incurred with the quantitation of the surrogate, dibutyl chlorendate, or the spike compounds (QC samples only) flagged by an asterisk (*) on the compound list.

كسا	No DBC recovery available due to a $\frac{f^{*}(\partial) \cup f}{\partial f}$ dilution factor.
	No spike recovery available due to a dilution factor.
	No spike recovery available due to severe matrix interference and/or the presence of high levels of PCBs which prevent quantitation of these compounds.
	No DBC recovery due to severe matrix interference.
	Variations between duplicate samples due to non-homogenous nature of soil sample.
	No DBC recovery due to dilution factor on packed/capillary (circle) and matrix interference on packed/capillary columns (circle).
	Low/high (circle) spike recoveries due to matrix interference.
	Additional Analyst/Quality Assurance Specialist comments:
	ials
date	6-27-83

QUALITY CONTROL NOTICE

Because of the high levels of PCB's in sample #________, there is no pesticide spike data available for memoriting. The presence of the PCB's effectively masked that of the spike commounds, preventing accurate quantitation. Duplicate data are available which confirm these results.

Bob Whitehead May 8-13-87 Quality Control Specialist

QUALITY CONTROL NOTICE

Semivolatile sample spike #582% and duplicate sample spike #582%, from the original sample #580%, required extensive dilutions in order to accurately detect and quantify all compounds present. Because this dilution factor decreased the surrogates and spikes to levels below the detection limit, these compounds are not reported.

The acid fractions were diluted by a 20:/ factor, while the base/neutrals were diluted 20:/

Bob Whitehead MM/
Quality Control Specialist
Date: 8-23-83

The semivolatile fraction of sample spike # 56/9 and duplicate spike # 56/9 exhibited unusual percent recovery values for the compound(s) listed below. These values are outside of control limits due to the non-homogenous nature of the soil sample used in preparing these spikes. This original sample (# 5607) contained the compound(s) listed below in the "non-spiked" analysis.

compound	
pheno!	
pentachlorophenol	*
	Bob Whitehead 1900 9 208> Quality Assurance Specialist
	<u>C#1887</u>
QUALITY ASSURA	NCE NOTICE
listed below. These values are out	e spike # 5824 and duplicate spike recovery values for the compound(s) side of control limits due to the none used in preparing these spikes. Intained the compound(s) listed below
compound	
1,2,4-trichlorobenzene	RECEIVED OCT 2 5 1983
	`.

Bob Whitehead WW 9-25-67 Quality Assurance Specialist

 3308 East Chapel Hill/Nelson Highway Post Office Box 12652 Research Triangle Park, NC 27709

Telephone: 919-549-8263 800-334-8525

Mead CompuChem

July 8, 1983

Dr. Alfred Haeberer
USEPA
Support Services Branch (WH-548-A)
Hazardous Response Support Division
401 M Street, S.W.
Washington, D.C. 20460

Dear Fred:

The new protocols for semi-volatile analysis are currently not amenable to running samples on a routine basis (IFB WA 83 A094, Contract 68-01-6762). In order to prevent buildup of delinquent samples, I have decided to revert to the calibration protocols of the previous contract on a 3-week interim basis (IFB WA 82 A155, Contract 68-01-6727). The changed surrogate and deliverable items of the new protocols will be followed. I will provide you detailed technical information documenting all problems with the new protocols within the next 10 days.

I believe this change is in the best interest of the program. However, if this is unacceptable to you, please call immediately.

Sincerely,

R. Lee Myers, Ph.D.

RLM: eh

EC: S. Kovell

Dick Thacker - SMD Gareth Pearson - EMSL

QUALITY ASSURANCE NOTICE: EPA CASE!

In addition to the difficulties experienced in the analysis of semi-volatile calibration standards referenced in the attached memorandum from Dr. R. L. Myers at CompuChem to Dr. A. Haeberer, USEPA, 7/8/83, similar problems have been seen in the initial volatile calibration analyses. The Laboratory is, consistent with the semivolatiles, reverting to the calibration protocols of the previous contract for volatiles, until the criteria problems can be overcome or the criteria themselves are changed for this contract.

and Thick

Director, Quality Assurance July 20, 1983

The semivolatile calibration standards criteria being applied by CompuChem for Calibration Check Compounds is that the shift check standard must have for those compounds a response factor which is within the 20% difference criterion compared to the multipoint calibration standard of the same level. Again, the old protocol criteria is being applied, in which the average of the response factor differences are summed, so some individual standards response factor may be outside the 20% criteria, but the average of all may be less than 20%; this would be acceptable, and then samples would be run.

Director, Quality Assurance July 22, 1983

SOIL SURROGATE PERCENT RECOVERY SUMMARY

CASE NO	1687
LOW LEVEL	**
WATER	
OC REPURT	110.

CONTRACTOR Mead Compuchem CONTRACT NO. 68-01-6762

NED. LEVEL SOIL/SED. XX CONTRACT NO. 68-01-6762

HIGH LEVEL OTHER (SpecIfy)

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SURR.	EXT.	EXT.		AMAL.	œ	SHO Traffic	(#233) D _B	(#247) BFB	(#258) D ₄ -1,2 Dichloro Ethane (ME)	(#447) D ₅ Nitro Benzene (19-120)	(#448) 2-Fluoro Biphenyl (17-120)	D ₁₀ Pyrene (ME)	mi-Volat (#496) Dj4 p-Ter Phenyl (ME)	05 Pheno1 (10-100)	(#619) 2-Fluoro Phenol (26-120)	(#628) 2,4,6- Tribrond Phenol (ME)	(#738) Dibutyl)[Dioxin] (#466) 1,2,3,4 TCDD (11-130)
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366	7-26		8-6-63														57	
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368	25		3-11-b3			-											41	
364			7 1	$L^{\frac{3}{2}}$		1					, ,	i]	1 1	A	_		INDA

Volatiles: Dioxia:

extside of QC limits outside of QC limits extside of QC limits

*Asterisked values are outside of QC limits. ME - Not established.

Q GANOTILE ** No DBC Resvery due to PCB interference Case 1887

SOIL SURROGATE PERCENT RECOVERY SUMMARY

CASE NO. 1887 LOW LEVEL WATER OC REPORT NO.	CONTRACTOR Mead Compuchem MED. LEVEL SOIL/SED. XX	CONTRACT NO
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RECEIVED OCT 2 5 1983

						ſ		Volatile][Semi-Volatile							[Pesticide][Dioxin]
SURR.	EXT.		ANA.	ANAL.	СС	SMO Traffic	(#233) D ₈	(#247) BFB (NE)	(#258) D ₄ -1,2 D1chloro Ethane (NE)	(#447) D ₅ Nitro Benzene (19-120)	(#448) 2-Fluoro Biphenyl (17-120)	D ₁₀ Pyrene (NE)	(#496) D ₁₄ p-Ter Phenyl (NE)	(#612) D ₅ Pheno1 (10-100)	(#619) 2-Fluoro Phenol (26-120)	(#628) 2,4,6- Tribrand Phenol (NE)	(#738) Dibutyl	(#466) 1,2,3,4 TCOD (11-130)
383	91-16 83		7.28	אור	5805	E3788	120	110	9.3	<u></u>	<u> </u>							
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368		_		<u> </u>						<u> </u>					· · · · · · · · · · · · · · · · · · ·		* 0	
344	2.27 63		3-8-63	714													•	16
3B3					580W	E3789	21	90	72									
367	7-14		8-11 83	602						93	130	110	150	30	42	75		
368				<u> </u>														
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363	726 83		729 13	714 633	5807	E3700	92	96	75									
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344	2-24		8-11-61															26
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383					POGE	E3792	Scree	and Mo	dlum									
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366	7-28		8-30 -8 3														3 ⊅ L	
364	7.7		8.463	719	5409													INJ*

Volatiles:

Semivolatiles: Dioxin:

out of 3; outside of QC limits
out of 5; outside of QC limits

*Asterisked values are outside of QC limits. NE - Not established.

*5808 - Interference * 5806 - NOT ENOUGH SAMPLE HT FOR TODD RE-ENTRALT & ANALYSIS

SOIL SURROGATE PERCENT RECOVERY SUMMARY

HATER	CONTRACTOR Mead Compu Chem MED. LEVEL SOIL/SED. XX	CONTRACT NO
QC REPORT NO.		

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]][Semi-Yolatile]][Pesticide][Dioxin]		
SURR.	EXT.	EXT. 1.D.		ANAL.	cc	SMO Traffic	DR	(#247) BFB (NE)	(#258) D4-1,2 Dichloro Ethane (NE)	(#447) D5 Nitro Benzene (19-120)	(#448) 2-Fluoro Biphenyl (17-120)	D ₁₀ Pyrene (NE)	(#496) D ₁₄ p-Ter Pheny) (NE)	(#612) D ₅ Pheno1 (10-100)	(#619) 2-Fluoro Phenol (26-120)	(#628) 2,4,6- Tribramo Phenol (NE)	(#738) Dibutyl Chlor- endate (NE)	(#466) 1,2,3,4 TCDD (11-130)	
383					5810	E3793	Scree	red Me	dium								·	<u> </u>	
382	8-19		8-25 -63	もり	5810 R					93	100	100	110	70	120	89			
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344			8-4-63															23	
383	7-26 8.3		7 -2h-63	633	<i>5</i> ′813	E3796	107	108	90										
	5-26 63		R-17-43	763						83	94	120	70	86	110	99	· · · · · · · · · · · · · · · · · · ·		
	226		p 4.63									1.2.5		1, 12			BDL		
364				740														14	
383					5814	€3797	Suces	and h	edium										
382	5/26		8:23:63		<u> </u>		30,00	11413		#	771	tion					 		
366	7-26			547						7		210 V					(10(*		
	8.20		5-25-63	3	5614 AF								-					IND*	

Volatiles:

out of 2; outside of QC limits out of 1; outside of QC limits out of 5; outside of QC limits

Semivolatiles: Dioxin:

*Asterisked values are outside of QC limits. NE - Not established.

Comments:

@ Dilution, @ OA Notice, @ see reinject fraction

CASE NO. 1667 LOW LEVEL WATER	CONTRACTOR Mead Compu Chem MED. LEVEL SOIL/SED. XX	CONTRACT NO. 68-01-6762 HIGH LEVEL OTHER (SpecTfy)
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LOW I WATEI QC RI	LEVEL R PORT	WO				ED. LEVEL DIL/SED.	×x			OTHER (Specify)					RECE	RECEIVED OCT 2 5 1983				
SURR.	EXT.	EXT. 1.D.	DATE ANA.	ANAL.	CC	SMO Traffic	(#233) D ₈ Toluene (81-120)	8FB	D ₄ -1,2 Dichloro Ethane	D ₅ Nitro Benzene	(#448) 2-Fluoro Biphenyl (17-120)	D ₁₀	D ₁₄ p-ter	D ₅ Phenol	(\$619) 2-Fluoro Phenol (26-120)	2.4.6-	Chlor-	[Dioxin] (#466) 1,2,3,4 TCDD (11-130)		
<i>3</i> 643					5815	£3798	2.144	LEJ M.	dium											
<u>382</u>			12-12-63	763		<u> </u>	ļ			<u> </u>	BDI	(<u>)</u> -			-					
368			<u> </u>	 		ļ		ļ			 	ļ					*@	<u> </u>		
364	1.27		X 3	740	<u> </u>	ļ				-	<u> </u>			<u> </u>				320		
3 <u>83</u>					ļ	 				<u> </u>		 	ļ							
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382						 	 -	<u> </u>		}										
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344	,		-	 	 	+				}				i				-		
383			<u></u>			 	<u> </u>		 		 	ļ	ļ	ļ!				<u> </u>		
3 <u>82</u> _			 	-		 						 						<u> </u>		
368 364						 		 				 -						 		
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<u>383</u>	-					 			<u> </u>	<u> </u>	ļ									
382			 		 	 		 		}										
300				 	 	 						 	 							
364												1]					Γ		

Volatiles: Semivolatiles:	out		<u> </u>	outside outside	of	QC	limits
Dioxin:	L out	OT		outside	01	QC	limits

*Asterisked values are outside of QC limits. ME - Not established.

Comments: (D GANutice	*(2) 1: 10000 Dil ution
	"(2) 1. 10000 DILWID

Volatiles: Semivolatiles: Dioxin:	3 E	33.3	383				Suee.	CASE NO. LOW LEVEL WATER OC REPORT NO.
	ر. د د	2778	5.28			728	EXT.	LEVEL .
.							EXT.	
	7-28-63	8-3-83	d-3.			8.283	DATE ANA.	EE7
	433	و 3 ما	914 1916			673	ANAL.	Neg 1
	2810	รัช <u>0</u> 9	वतप्रड			5802	-8	<u> </u>
outside o	E3753	£3792	£3)91.			€378	SMO Traffic	CONTRACTOR MED. LEVEL SOIL/SED.
of OC 11mits	42	20 m 09	700 800 B				(#233) D _B Toluene (#1-120)	
	ત્ર હ	BDL BDL	A Watire			 	(#247) BFB (NE)	Volatile.
	75	BUL	₽Þ.			76	(#258) Dq-1,2 Dichloro Ethane (NE)	A STATE OF THE STA
							(447) D5 Nitro Benzene (19-120)	CONTRACT NO. 6 HIGH LEVEL OTHER (SpecTTY)
							(#448) 2-Fluoro Biphenyi (17-120)	No. 68-
Aste							DIO Pyrene (NE)	110
risked values ar Not established.							1) (#496) (#61 D)4 D5 ne Phenyl Phen (ME) (10-1	01-6762
lues are							(612) D ₅ Phenol (10-100)]
*Asterisked values are outside of QC NE - Not established.							(#619) 2-Fluoro Phenol (26-120)	FUEIVE
r QC Haits.							(#628) 2,4,6- Tribrom Phenol (NE)	KECEIVED OCT 2
•							(#738) (#466) Dibutyl G Chlor- 1,2,3,4 endate ICDO (ME) (11-130)	2 5 1983 [Pesticide]
							(#466) 1,2,3,4 1CD0 (11-130)	3 HDioxin

LX01.x

SOIL SURROGATE PERCENT RECOVERY SUMMARY

CASE NO. 1887 CONTRACTOR Mead CompuChum CONTRACT NO. 68-01-6762 NED. LEVEL HIGH LEVEL SOIL/SED. XX OTHER (SpecTry) PF	FOEIVED OCT 2 5 198 3

	VOA Only-medium [Volatile][Dioxin]
SURR.	EXT.	EXT.	DATE	ANAL. 1.0.	Œ	SHO Traffic No.	(#233) D ₈ Toluene (81-120)	AF B	D4-1,2 D4-1,2 Dichloro Ethane (NE)	Benzene	2-Fluoro Biphenyl (17-120)	Pyrene	Phenyl	D _S Phenol (10-100)	Pheno I	2,4,6- Tribrana Phenai (NE)	I AMARIA I	1,2,3,4 TCDO (11-130)
	7-16 9-3					1 1	84	৪১	84									
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383	1٠ يغ ع ع		2.6.83	G 73	<u> ર</u> જ્ઞાત	£3797	95	100	27									
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383	7-28 83		B 3-63	633	5315	E3798	See BDL	DA Not	RDL									
				-														
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											, ,							

Volatiles: Semivolatiles: Dioxio:	out out out	of	outside outside outside	of	QC	limits
	 -	••	 ****	••	4	110163

*Asterisked values are outside of QC limits. NE - Not established.

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Councerts:	
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SOIL SURROGATE PERCENT RECOVERY SUMMARY																		
CASE LOW L WATER QC RE	NO. EVEL	NO	387	!	_ CON MEE SO!	ITRACTOR LEVEL LL/SED.	Mer d Compulhem contract no. 68.01.6762 HIGH LEVEL OTHER (Specify)									198 3		
	_																	
					cc	SMO Traffic	(#233) D ₈ Toluene (#1-120)	BFB	(#258) D4-1,2 Dichloro Ethane	(#447) D ₅ Nitro Benzene	(#448) 2-Fluoro Biphenyl	(#471) D ₁₀ Pyrene	(#496) D14 p-Ter Phenyl	(#612) D ₅ Phenoi	(#619) 2-Fluoro Phenol (26-120)	(#628) 2,4,6- Tribromo Phenoì	(#738) Dibutyl Chlor- endate	(#466) 1,2,3,4 TCUD
1.0.	7 48	1.0.	ANA.	1.0.	5803	16 372K	X-7/	-1	7.5	(13-120)	(17-120)	(NE)	(NL)	(10-100)	(20-120)	100	(rac)	(11-130)
283	67		8637	013	3802	E 7103	1-16-		4. /.							-		
							 											
		 																
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olati emivo loxin	latil	es :		out of		outside o	of QC limit of QC limit of QC limit	ts					risked v Not esta		outside of	QC limits	i.	

Comments:

CASE LOW L WATER QC RE	CASE NO. 1887 LOW LEVEL XX WATER QC REPORT NO.				CONTRACTOR MAD MED. LEVEL SOIL/SED.								6762	<u>-</u> -	RECEIVED OCT 2 5 1983				
	ERU					r		Volatilu]	۱۲		Se	eni-Volat	ile](Pesticide][Dioxin]	
SURR.	EXT.	EXT.	DATE ANA.	ANAL.	CC	SMO	(#233) D ₈ Toluene (81-120)	BFB	(#258) D4-1,2 Dichloro Ethane (NE)	(#447) D ₅ Nitro Benzene (19-120)	(#448) 2-Fluoro Biphenyl (17-120)	D ₁₀ Pyrene	p-Ter Phenyl	D ₅	(#619) 2-Fluoro Phenol (26-120)	[2,4,0-]	DIDGENI	(#466) 1,2,3,4 TCUD (11-130)	
						E3785													
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764			8-11															inde	
volati Semivo Dioxin Comen	latil :		_4	out of		utside o utside o utside o	f QC limit f QC limit f QC limit	ts ts ts					risked v Not esta		outside of	QC limit:	•		

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VOLATILES REAGENT BLANK SUMMARY

Page _ of _

PECFIVED OCT 2 5 1983 CASE NO. 1887 CONTRACTOR COMPUCHEM CONTRACT NO. MED. LEVEL -HIGH LEVEL LOW LEVEL SOIL/SED. OTHER (SpecTfy) WATER UNITS (Circle) ~ ug/kg ug/1 OC REPORT NO. SAMPLES CONTRACT ASSOCIATED CONCEN- DETECTION SMO TRATION LIMITS COMMENTS CAS# NUMBER COMPOUND FRACTION **VOLATTLES:** File 1.D. 5800 £3183 _ 66830727605 NONE 5801 E3784 Instrument 1.D. 5812 NUNE 82755 GB830728A05 83756 5813 **VOLATILES:** File 1.D. E3788 5805 <u>5810</u> NONE G & 830728CUS E3702 5807 Instrument 1.0. €3785 5802 5806 € 3789 C6830802A11 NANC E3786 5803 581/ E3794 2 3793 VOLATILES: File 1.D. 83789 5806 5814 E3717 NONE CB83080ZB11 E3791 5808 Instrument 1.0. 8379/ 5808 5815-E3798 CC 830803C11 NONS. £3792 5809 ____ VOLATILES: File 1.D. 83787 5804_ C6830829A11 Instrument 1.D.

Page _ of _

VOLATILES

REAGENT BLANK SUMMARY

CASE NO. 1887 LOW LEVEL MATER OC REPORT NO.		CONTRACTOR MED. LEVEL XX	CONTRACT NO. 6 HIGH LEVEL OTHER (Specify) UNITS (Circle)	ug/kg ug/1	RECEIVED OCT 2 5 1983				
		_	CONTRACT CONCEN- DETECTION		ASSOCIATED SMO	SAMPLES CC			
FRACTION FOLATILES:	CAS# NUMBER	COMPOUND	TRATION LIMITS	COMMENTS	- 1	6911			
					<u>E2786</u>	580X			
67)Y									
instrument I.D.									
									
VOLATILES:									
		- Al- ve			- 				
6054		NONE			E3785	5302,5806			
lnstrument 1.D.					E 3789	5808-01			
					E3791 E3717	5811, 5814-15			
					E3712 E398				
VOLATILES:					<u>E3794</u>				
file 1.D.				**************************************					
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Instrument									
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Instrument									
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# VOLATILES

## REAGENT BLANK SUMMARY

CASE NO. LOW LEVEL WATER QC REPORT 1	1887	CONTRACTOR MED. LEVEL SOIL/SED.	Mead	HIGH LE OTHER (	T NO. (COLUMN TO THE SPECIFY) (Circle)	(18-01-6762 (119/kg) ug/1	Ħ	ECEIVED OCT 2 5 1983
FRACTION	CASE NUMBER	COMPOUND		CONCEN- TRATION	CONTRACT	COMMENTS	ASSOCIATE SMO	ED SAMPLES CC
VOLATILES:							E 3783	
Fije I.D. 6/04	75-09-2	Methylave	Chlande	1.8	2.5		E3784	5800-01,
Instrument	<u> </u>			4:			E3787	5804-05
1.0.							E3788	5807, 5813
<del></del>						<u></u>	E3770	5810,5812
	•						E2793	E3796
VOLATILES:			· · · · · · · · · · · · · · · · · · ·				E 3795	<del></del>
File 1.D.		******					<del></del>	
Instrument								
								•=========
VOLATILES:								
File 1.0.							<del></del>	
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Instrument I.D.	<del></del>						<del></del>	
	<del></del>					<del></del>		
VOLATILES:								
F11e I.D.		<del></del>						
Instrument							·	<del></del>
I.D.								
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SEMI-VOLATILE

				SEMI-VOLATILE GENT BLANK SUMMARY				Page of	
CASE NO. LOW LEVEL WATER QC REPORT N	/337 XX	CONTRACTOR MED. LEVEL SOIL/SED.	Meal	CONTRACT NO. HIGH LEVEL OTHER (Spectuality (Circ)	fy)	01 - 676 Z	<u></u>	RECEIVED 0	ct <b>2 5 198</b> 3
FRACTION SEMI-	CAS# NUMBER	COMPOUND		CONCEN- TRATION	CONTRACT DETECTION LIMITS	COMMENTS		ASSOCIATED SMO	SAMPLES CC 5800-06
File I.D. 6025 Instrument I.D.	SCAN @ 2000			330		<80%	<i>funty</i>	E3784 E3785 E378 E3786 E378)	<u>581315</u>
								E3787 	
SEMI- VOLATILES:	(03-38-7)	Genreve	Methyl	30u.o		9419	au - bu	E37%	5807
file I.D. 6207 Instrument I.D.		() ditties	HEINYI	700.0		94.1%	<i>[471]</i>		
									•
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### SEMI-VOLATILE

### REAGENT BLANK SUMMARY

CONTRACT NO.	68-01-6762
HIGH LEVEL	
OTHER (SpecTf	y)
INSTA IOI 3	\

Page __ of __

CASE NO. / LOW LEVEL _ WATER QC REPORT NO	XX	CONTRACTOR COMPUREM  MED. LEVEL  SOIL/SED. XX	HIGH LEVEL OTHER (SpecT UNITS (Circ)	fy)	kg ug/1	RECEIVED	ግ በሮተ ያ	§ 19 <b>83</b>
FRACTION	CAS# NUMBER	COMPOUND	CONCEN- TRATION	CONTRACT DETECTION LIMITS	COMMENTS	ASSOCIATED SMO		SAMPLES CC
SEMI- VOLATILES:						E3791		-
File 1.0.	108-11-2	2-PENTANOL 4-METHYL-		<del></del>	PURITY 82%.	E3792		<u>5808-5812</u>
·					<u> </u>	€ 3793 € 3794		<u>.                                    </u>
Instrument I.D.						E3795		
		<u> </u>						
		-						<del></del>
		<del></del>						
SEMI-								
VOLATILES: File I.D.	<del></del>			*				
6835R		None					£ 3787	5804
Instrument 1.D.							23789	
	•						<del></del>	
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### REAGENT BLANK SUMMARY

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E NO. /867 LEVEL XX REPORT NO.	CONTRACTOR MEAD MED. LEVEL SOIL/SED.	CONTRACT NO. HIGH LEVEL OTHER (Specify UNITS (Circle)			<b>T</b>	ECEIVI	20 001	Z 4 150
FRACTION CAS# NUMB	DER COMPOUND	CONCEN- TRATION	CONTRACT DETECTION LIMITS	COMMENTS	ASSOCIATE SMO		SAMPLES CC	
File I.D. 6025 Instrument I.D.	NONE			60%. RECOVERY	E3783 E3784 E3785 E3786 E3787 E3787	63796 <u>63717</u> 63798		- 5806) - 5815
PESTICIDES: File I.D. 6204 Instrument I.D.	NONE				E2770			5807
PESTICIDES:  File 1.0.  620 4  Instrument 1.0.	None			22% becovery	£3792	<u> </u>		
PESTICIDES: File 1.D.					<u>£3713</u>			
Instrument								

# TCDD REAGENT BLANK SUMMARY

68.01-6762 Meal CONTRACTOR CONTRACT NO. CASE NO. HECEIVED OCT 2 5 1983 HIGH LEVEL MED. LEVEL LOW LEVEL SOIL/SED. OTHER (SpecTfy) MATER ug/kg ug/1 OC REPORT NO. UNITS (Circle) ASSOCIATED SAMPLES CONTRACT CONCEN- DETECTION CC SMO CAS# NUMBER COMPOUND COMMENTS . **TRATION** LIMITS FRACTION TCDD : 5800-06 E3787 F11g I.D. NONE E3784 5813-15 MOOVERY 6025 E3785 E 3781 Instrument 1.0. E3786 E3796 E3787 E2717 E3788 E3798 TCDD : 5808-5812 E377/ file L.D. 83792 Instrument 83713 I.D. 53794 23795 TCDD : File I.Q. 14% hec. 83740 5807 NONE 6204 Instrument I.D. TCDD : File I.D. 6 % lec. 83797 5814-5815 6018 NONE 83198 Instrument 1.0.

CASE NO.	1337			COMPUCHEM
LUW LEVEL		MED. LEVEL	XX	
WATER		SOIL/SED.	XX	
QC REPORT NO	)			

CONTRACT NO. 68-01-6762
HIGH LEVEL
OTHER (Specify)
UNLIS (Circle) ug/g ug/l

RECEIVED 001 2 5 1983

FRACTION	COMPOUND	SMO #	CONC. SPIKE ADDED	CONC.	HEC .	CONC.	REC.	RPD	QC RPD	LIMITS* RECOVERY	COMMENTS
	1,1-Dichloroethylene	NI)	25	21	34	21	14	0	<15%	51-150	1802-03,
VOA 5311 SMO #	Trichioroethylene	1/1)	25	21	84	21	94	ر	<15%	74-130	5806, 5368-07,
E3794	Chlorobenzene	ND	25	22	33	22	33	U	<15%	67-130	5811, 5814-15 5810
MS # E 3794	Toluene	4.8	25	22	33	22	33	Ü	<15%	58-130	S/40 # 3794
MSD <u>FE 379</u> y	Benzene	NO	25	20	Ju	20	30	J	<15%	56-130	,, -
B/N	1,2,4-Trichlorobenzene								<50%	38-110	
SHO #	Acenaphthene								<50%	57-120	
	2,4-Dinitrotoluene								<50%	43-110	
	Di-M-Butylphthalate								<50%	13-110	
MS #	Pyrene							<u> </u>	<50%	25-140	
MSD #	N-Nitrosodi-N-Propylamine						<u></u>	<u> </u>	<50%	34-110	
	1,4-Dichlorobenzene								<50%	33-110	
ACID	Pentachlorophenol								<40%	19-120	
SMO #	Phenol						<u> </u>		<40%	23-80	
	2-Chlorophenol				<u> </u>				<40%	33-110	
MS /	P-Chloro-M-Cresol				<u> </u>				<40%	32-110	
MSD #	4-Nitrophenol				<u> </u>		ļ		<40%	15-90	
PEST	Lindane				<u> </u>	<u> </u>	ļ		<40%	87-110	
SMO #	Heptachlor				ļ				<40%	43-120	
	Aldrin				<b> </b>				<40%	45-110	
MS #	Dieldrin			<b> </b>	<b> </b>				<402	56-120	
MSD #	Endrin		<del></del>		<b> </b>			<b> </b>	<40%	89-110	
	p,p-DDT				<u> </u>				<40%	82-100	

^{*}Asterisked values are outside QC limits.

RPD:	VOAs <u>O</u> out of <u>S</u> ; outside QC limits	RECOVERY:	VUAs O out	of ≤; outside QC limits
	B/N out of; outside QC limits		B/N out	of ; outside QC limits
	ACID out of; outside QC limits			of outside QC limits
	PEST out of; outside QC limits			of; outside QC limits

UNTE ICAIE / KELUVER! PHINIA STINE

CONTRACTUR MEAD COMPUCHEM MED, LEVEL XX

1887

CASE NO.

1,1-Dichloroethylene

COMPOUND

FRACTION

UC KEPORT NO. LUW LEVEL XX

**Trichloroethylene** 

SO S

Chlorobenzene

E3796

Toluene Benzene

5822 NS 163796 5843R NSO 163714

CONTRACT NO. 68-01-(e7le2HIGH LEVEL
OTHER (Specify)
UNITS (Circle) / Lug/kg ug/

(ug/kg · ug/I

5807-5815 5807-5815 5807-5815 Notice See 9A Notre See QA 5812-13 5807 COMMENTS SEE RECOVERY 43-120 45-110 56-130 13-110 19-120 74-130 67-130 38-110 43-110 25-140 34-110 33-110 32-110 87-110 56-120 89-110 51-150 58-130 33-110 82-100 57-120 23-80 15-90 RPO | RECOVE <40% <15% <15% <151> <15% <15% <50% ***205 50% *20\$** <50% <50% **<50%** <40x **40**% <40X <40% <40X 40x <40x <40% <40x **404** RPD 15 Ī 1 ſ 1 ١ 1 ſ ١ 5 ţ í ١ 1 Ø 9 8 REC. ĺ ١ 1 46 96 I ١ ١ ١ 1 l ı B ١ ĺ 16 8 1 00000 8.2 CONC. 4 3 <u>ન</u> ( ١ ł ١ ١ I ત્ ١ 1 I ĺ 1 H * 50 4  $=\frac{7}{7}$ 104 ¥EC ₩ l ١ ١ 1 ١ ł I ١ l ١ ١ ١ l i i 1 20028 CONC. I 3 3 1 1 1 ſ 1 1 1 1 ĺ ١ ĺ 9 世 7 17 CONC. SPIKE ADDED 12000 2000 2000 2000 12.5 12.5 12.5 12.5 12.5 2000 2000 2000 2000 2000 8000 2000 2000 8 8 80 80 80 80 SHO / 120,000 92 9 2 Ş Ş Q 2 2 AN Z 2 2 3 2 ١ Ş S ì 1 ١ 1 ţ N-Nitrosodi-N-Propylamine

1,2,4-Trichlorobenzene

5802-

Oi-N-Butylphthalate

Pyrene

5834

NSO FEBRE NS #E3785

2,4-Dinitrotoluene

=3785

Acenaphthene

25

1,4-Dichlorobenzene

Pentach lorophenol

Sec. Sec.

MS #E3785 P-Chloro-M-Cresol

7834 5835

4-Nitrophenol

**Heptachlor** 

38

Aldrin

£3785

Lindane

5802

MS 1637&5 Dieldrin

MSD 163784 Endrin

58×7R 5826R

2-Chlorophenol

E3785

Phenol

25

CA NOTICE

p.p-001

outside QC limits outside QC limits outside QC limits outside QC limits الماالم o o o o VOAS O out o
ACID OUT O <u>8</u>80

outside QC limits out of out of out of out of out of VOAs -- ACID -- PEST -- CO RECOVERY:

*Date Limits Set 12/82 Revision Due 6/83

^{*}Asterisked values are outside QC limits.

CONTRACTOR MEAD COMPUCHEM SOIL/SED. XX

CONTRACT NO. 68-01-6762
HIGH LEVEL OTHER (Specify)

QC REPORT NO. 123-52

UNITS (Circle)

			SHO /	CONC. SPIKE	CONC.	1	CONC.	1	Γ	OC	LIMITS*	
	FRACTION	COMPOUND	CUNC	ADDED	MS	REC .	MSD	REC.	RPD	RPD	RECOVERY	COMMENTS
	90A 5607	1,1-Dichloroethylene	NO	12.5	18	144	17	134	6	<15%	51-150	5000-01
	SMO #	Trichloroethylene	ND	12.5	13	104	12	96	8	<15%	74-130	5804-05
:	E 3776	Chlorobenzene	NO	12.5	14	112	12	96	15	<15%	67-130	/ <b>0</b>
5611	MS 0 € 3776	Toluene	Ny	12.5	12	96	10	80	13*	<15%	58-130	
2917	MSD <u>12377</u> 4	Benzene	40	12.5	12	96	10	80	19*	<15%	56-130	•
	B/N 5337	1,2,4-Trichlorobenzene	N()	2000	1900	95	2100	105	10	<50%	38-110	.•
	253 / SHO #	Acenaphthene	My	2000	1800	90	2200	1/0	26	<50%	57-120	
	£3176	2,4-Dinitrotoluene	NV	2000	430	24*	NF	_ *	_*	<50%	43-110	5800-06
		Di-N-Butylphthalate	NV	2000	1200	60	1500	15	22	<50%	13-110	
5017	MS # 23776	Pyrene	NO	2000	2500	130	3700	165 *	24	<50%	25-140	
7014	MSD #€3776	N-Nitrosodi-N-Propylamine	VV	8000	11300	133*	1000	138*	0	<50%	34-110	
		1,4-Dichlorobenzene	760	2000	2000	12	2700	77	22	<50%	33-110	·
	ACID 560)	Pentachlorophenol	11000	2000	170W	30	7900	- <b>K</b>	-*	<40%	19-120	
	SMO #	Phenol	100,000	2000	49000	-*	520us	- *	- *	<40%	23-80	5800-06
	E3116	2-Chlorophenol	290	2000	1300	76	1700	75	22	<40%	33-110	
	MS # 15 37%	P-Chloro-M-Cresol	NV	2000	2200	113	2000	100	/0	<40%	32-110	
	MSD <u>₹311</u> (	4-Nitrophenol	N()	12000	300	67	BUL	_*	-*	<40%	15-90	······································
	PEST 5605 SMO 1	Lindane	NV	80	NF	- *	NF	_ *	-*	Ī	87-110	
		Heptachlor	NV	80	110.3	138*	193	241*	54*	<40%	43-120	5800-06
_	£ 3774	Aldrin	NP	80	126	158*	NF	-*	-+	<40%	45-110	/
5615	MS # <u>£ 377</u> 9	Dieldrin	NO	80	11.6	15*	NF	- <b>*</b>	_*	<40%	56-120	
5616	HSD #2377	Endrin	NV	80	110.7	138*	NF	-*	_*	<40%	89-110	
		p.p-00T	NV	80	NF	<b>-</b> *	NF	- *	_*	<40%	82-100	

^{*}Asterisked values are outside QC limits.

RECOVERY: VOAs ) out of 10; outside QC limits
B/N 5 out of 12; outside QC limits
ACID 5 out of 10; outside QC limits
PEST 2 out of 2; outside QC limits

LOW L	NO. 1887 CONTRACTOR Mead ( EVEL MED. LEVEL SOIL/SED.		HIGH L	T NO. 68-01-( EVEL (Specify)					
D	DFTPP File Name: ate: 8-10-83 Shift:	DH\$30\$10B1	S Analys	it: 323					
Mass	DFTPP Ion Abundance Criteria		% Rela	ative Abundan	ce				
51	30 - 60 percent of mass 198	57%	·						
68	less than 2 percent of mass 69	<.1%							
70	less than 2 percent of mass 69	< .190							
127	40 - 60 percent of mass 198	47%							
197	less than 1 percent of mass 198	0.3%							
198	base peak, 100 percent	100%							
199	5 - 9 per cent of mass 198	6.7%							
275	10 - 30 percent of mass 198	22%							
365	greater than 1 percent of mass 198	2.0%	_ ' >						
441	present but less mass than 443	13%							
442	greater than 40 percent of mass 19	92%							
443	17 - 23 percent of mass 442	17%			( 18.8 %)*				
DFTP	P and BFB Performance Results:	<del></del>							
	The DFTPP performance results we	re reviewed a	nd found 1	to be within	the specified				
	criteria.								
		Initials	\$	D	ate				
	Deviations Date/Time/Instrument File Number	r Compound	m/z_	Required Abundance	Observed Abundance				
		<del></del> -							
İ									
	•	Inii	tials		Date				
Comme				<del></del> 1					
Benzi Area Di-N-	Pentachlorophenol Response Factor = Area 188 x 50 = 15  Benzidine Detectable Yes No  Area (Counts) 40 ng D10 Anthracene = 89308  Di-N-Butyl Phthalate Saturated Yes No								
r 1 9	ure in ( ) is % of mass 442								

CASE	NO. 1987 CONTR	ACTOR Mead Co	mpuChem		ONTRACT NO. 68-01-6762				
	EVEL MED.	LEVEL		HIGH LE	VEL				
WATER	SUIL/	SED.		OTHER (	Specify)				
D	DFTPP sate: <u>\$://-83</u> S	File Name: A	483081161	Analys	t:_ 602				
Mass	DFTPP Ion Abundance Criteria			% Rela	tive Abundan	<u>ce</u>			
51	30 - 60 percent of mass	198	560/0						
68	less than 2 percent of	mass 69	0.10						
70	less than 2 percent of	mass 69	00/0						
127	40 - 60 percent of mass	198	410/01						
197	less than 1 percent of	mass 198	0.10						
198	base peak, 100 percent		1000/6	·					
199	5 - 9 per cent of mass	198	8°/0						
275	10 - 30 percent of mass	198	210/6	<del></del>					
365	greater than 1 percent	of mass 198	20/0	. 1					
441	present but less mass t	han 443	9%						
442	greater than 40 percent	of mass 198	60010			·			
443	17 - 23 percent of mass	442	120/0	·		( 20%.)*			
DETP	P and BFB Performance Re	sults:							
	The DFTPP performance criteria.	<del></del>	reviewed an	d found t	o be within	the specified			
			Initials		D	ate			
	Deviations Date/Time/Instrument	File Number	Compound	m/z	Required Abundance	Observed Abundance			
	•		Init	ials		Date			
Penta	Comments:  40 Area 266  Pentachlorophenol Response Factor = Area 188 X 50 = 1.70								
Area	dine Detectable  X  Yes (Counts) 40 ng D10 Anthr Butyl Phthalate Saturate		No No	RECE	IVED OCT 2	5 1983			
* Fig	ure in ( ) is % of (	mass 442							

FORM VII Cace 1887

LOW L	NO. 1887 EVEL CONTRACTOR Mead C MED. LEVEL SOIL/SED.		HIGH LE	T NO. <u>68-01-</u> VEL Spec ¹ fy)	
D	DFTPP File Name: 4 ate: 8-//-93 Shift: 6	D#830911 B	Analys	t: <u>602</u>	
Mass	DFTPP Ion Abundance Criteria		% Rela	tive Abundan	ce
51	30 - 60 percent of mass 198	41010			
68	less than 2 percent of mass 69	0.10			
70	less than 2 percent of mass 69	<b>▶</b> 1/0			
127	40 - 60 percent of mass 198	45.10	·		
197	less than 1 percent of mass 198	0%	-, <u></u>		· · · · · · · · · · · · · · · · · · ·
198	base peak, 100 percent	1000/0	····		· · · · · · · · · · · · · · · · · · ·
199	5 - 9 per cent of mass 198	7°10			·
275	10 - 30 percent of mass 198	220/0	·		
365	greater than 1 percent of mass 198	10/0	_ · \		<del></del>
441	present but less mass than 443	120/0			
442	greater than 40 percent of mass 198	870/0			····
443	17 - 23 percent of mass 442	150/0			(170/0.)*
DFTP	P and BFB Performance Results:				
	The DFTPP performance results wer criteria.	e reviewed a	nd found t	o be within	the specified
1		Initial	<u> </u>	D	ate
	Deviations Date/Time/Instrument File Number	Compound	m/z	Required Abundance	Observed Abundance
Comme	nts:	Ini	tials		Date
Pentachlorophenol Response Factor = Area 188 X 50 = .24  Benzidine Detectable   X  Yes					
' '9	uie iii				

LOW L	NO. 1887 CONTRACTOR Mead Contr		HIGH L	CT NO. <u>68-01-</u> EVEL (Specify)			
D	DFTPP File Name: Cate: 9-11-83 Shift: 6		Analy	st: <u>602</u>			
Mass	DFTPP Ion Abundance Criteria		% Rel	ative Abundan	ce		
_51	30 - 60 percent of mass 198	59%		·.			
68	less than 2 percent of mass 69	0.10					
70	less than 2 percent of mass 69	0.10					
127	40 - 60 percent of mass 198	580/6		····	·		
197	less than 1 percent of mass 198	6%					
198	base peak, 100 percent	1000/0		<del></del>			
199	5 - 9 per cent of mass 198	7010					
275	10 - 30 percent of mass 198	29%					
<b>3</b> 65	greater than 1 percent of mass 198	40/0					
441	present but less mass than 443	140/0					
442	greater than 40 percent of mass 198	99%	<u> </u>				
443	17 - 23 percent of mass 442	19%			(190/0)*		
DETP	P and BFB Performance Results:				<u> </u>		
	The DFTPP performance results wer criteria.	e reviewed a	nd found	to be within	the specified		
		Initial	<u> </u>	D	ate		
	Deviations Date/Time/Instrument File Number		m/z	Required Abundance	Observed Abundance		
					<del></del>		
'		Ini	tials		Date		
Comme				<u>-</u>			
Benzie Area Di-N-	Pentachlorophenol Response Factor = Area 188 X 50 = .06  Benzidine Detectable X Yes No  Area (Counts) 40 ng D10 Anthracene = /7200 RECEIVED ULI 2 5 1983  Di-N-Butyl Phthalate Saturated Yes X No  * Figure in ( ) is X of mass 442						

SEMI-VOLATILE	INSTRUMENT	TUNE	AND	PERFORMANCE
	\$ 110 1 110 · · · · · · · · · · · · · · ·		שויח	I PILL ALL PRINCE

CASE LOW L WATER	EVEL MED. LEVEL		HIGH LE	T NO. <u>68-01-</u> VEL Specify)			
D	ate: 8-12-83 DFTPP File Name: D	C 2812C1	Analys	t: <u>763</u>			
Mass	DFTPP Ion Abundance Criteria		% Rela	tive Abundan	<u>ce</u>		
51	30 - 60 percent of mass 198	50.6	<u>.</u>				
<b>6</b> 8	less than 2 percent of mass 69	<del></del>					
70	less than 2 percent of mass 69	-					
127	40 - 60 percent of mass 198	48.3.					
197	less than 1 percent of mass 198			· · · · · · · · · · · · · · · · · · ·			
198	base peak, 100 percent	100.0					
199	5 - 9 per cent of mass 198	_					
275	10 - 30 percent of mass 198	23.6					
<b>3</b> 65	greater than 1 percent of mass 198	3.2	. * *				
441	present but less mass than 443	10.4					
442	greater than 40 percent of mass 198	78.4					
443	17 - 23 percent of mass 442	13.9			( 18%)*		
	P and BFB Performance Results:  The DFTPP performance results were criteria.	e reviewed and	found t	o be within	the specified		
		Initials	<del></del>		ate		
	Deviations Date/Time/Instrument File Number	Compound	m/z	Required Abundance	Observed Abundance		
		Initi	als		Date		
Comme	nts:	A 24	· c				
Benzie Area	Pentachlorophenol Response Factor = Area 188 x 50 = .14  Benzidine Detectable  Yes  No  Area (Counts) 40 ng D10 Anthracene = 96,166 Di-N-Butyl Phthalate Saturated Yes  No RECEIVED OCT 2 5 1983						
* Fig	ure in ( ) is % of mass 442						

F0 Case 1887

CASE LOW L WATER	NO. 1887 CONTRACTOR Mead MEAD MEAD MEAD MEAD MEAD MEAD MEAD	ompuChem	HIGH LE	T NO. <u>68-01-</u> VEL (Spec [†] fy)		
D	DFTPP File Name: ate: <u>&amp;-13-53</u> Shift: <u>ろ</u>	DH83081	2 RILL Analys	it: <u>7</u> 33	<del>)</del>	
Mass	DFTPP Ion Abundance Criteria		% Rela	- ative Abundan	ce	
51	30 - 60 percent of mass 198	60%				
<b>6</b> 8	less than 2 percent of mass 69	1.490				
70	less than 2 percent of mass 69	< 19 ₆				
127	40 - 60 percent of mass 198	43%				
197	less than 1 percent of mass 198	L.198				
198	base peak, 100 percent	100%				
199	5 - 9 per cent of mass 198	7.5%				
275	10 - 30 percent of mass 198	19%				
365	greater than 1 percent of mass 198	1.6%				
441	present but less mass than 443	10%				
442	greater than 40 percent of mass 198	66%				
443	17 - 23 percent of mass 442	11 %			( 172)*	
DFTP	P and BFB Performance Results:		·			
	The DFTPP performance results were criteria.	e reviewed an	d found 1	to be within	the specified	
1		Initials		D	ate	
	Deviations Date/Time/Instrument File Number	Compound	m/z	Required Abundance	Observed Abundance	
		Init	ials		Date	
Comments:  40 Area 266  Pentachlorophenol Response Factor = Area 188 x 50 = .15  Benzidine Detectable  Yes  No Area (Counts) 40 ng D10 Anthracene = Di-N-Butyl Phthalate Saturated Yes  No RECEIVED OCT 2 5 1985  * Figure in ( ) is % of mass 442						

CASE LOW L WATER	NO. 1887 CONTRACTOR Mead C	ompuChem	HIGH LEV	NO. <u>68-01-6</u> EL pecify)	5762
D	ate: 8/4/83 DFTPP File Name: 2 Shift:	HB30814A14	Analyst	: 586	
Mass	DFTPP Ion Abundance Criteria	, .	% Relat	ive Abundan	<u>:e</u>
51	30 - 60 percent of mass 198	54.19			
68	less than 2 percent of mass 69				
70	less than 2 percent of mass 69	<u> </u>			
127	40 - 60 percent of mass 198	47.40			
197	less than 1 percent of mass 198	0.32	<del></del>		
198	base peak, 100 percent	100.00			
199	5 - 9 per cent of mass 198	7.70			
275	10 - 30 percent of mass 198	18.42			
365	greater than 1 percent of mass 198	1.61			
441	present but less mass than 443	7.36			
442	greater than 40 percent of mass 198	52.54		<del></del>	
443	17 - 23 percent of mass 442	10.30			(19.60.)*
DFTP	P and BFB Performance Results:				<del></del>
	The DFTPP performance results wer	e reviewed and	l found to	he within	the specified
	criteria.	NC		9/.	//aa
		Initials	<del></del>	0/14	<u>///3</u> ate
	Deviations Date/Time/Instrument File Number	Compound		Required Abundance	Observed Abundance
			<del></del>		
}	:				
		Initi	als		Date
Comme				~	
Penta	chlorophenol Response Factor = Area		0.12		
	dine Detectable Yes No. (Counts) 40 ng D10 Anthracene = 402		RE	CEIVED OC	T 2 5 1983
Area Di-N-	(Counts) 40 ng D10 Anthracene = 402 Butyl Phthalate Saturated   Yes	□ No	•		
* Fia	ure in ( ) is % of mass 442	<del></del>			

CASE	NO. 1667 CONTRACTOR Mead C	ompuChem	CONTRACT HIGH LEV	NO. 68-01-6	3762
WATER	EVEL MED. LEVEL SOIL/SED.		OTHER (S	pecify)	
	DFTPP File Name: ate: Shift:		Analyst		
Mass	DFTPP Ion Abundance Criteria		% Relat	ive Abundano	: <u>e</u>
51	30 - 60 percent of mass 198				
68	less than 2 percent of mass 69	55			
70	less than 2 percent of mass 69				
127	40 - 60 percent of mass 198	41,			
197	less than 1 percent of mass 198	L1			
198	base peak, 100 percent	104	· <b></b> · · · · · · · · · · · · · · · · · · ·		
199	5 - 9 per cent of mass 198	7			
275	10 - 30 percent of mass 198	17			
365	greater than 1 percent of mass 198	71_	· \		
441	present but less mass than 443	44y)	···		
442	greater than 40 percent of mass 198	749			
443	17 - 23 percent of mass 442	14.97		(	(18.)*
DFTP	P and BFB Performance Results:	<del></del>		<del></del>	
I X	The DFTPP performance results wer	e reviewed and	found to	be within i	the specified
	criteria.	11/		41	//-
j		Initials		Di	ate
	Deviations Date/Time/Instrument File Number	Compound	m/2	Required Abundance	Observed Abundance
<u>L</u>		Initi	als		Date
Benzie Area Di-N-	chlorophenol Response Factor = Area	0 Area 26 188 X 50 7403 No	- <b>-</b> [	VED NOT 2	5 1983

SEMI-YULATTLE INSTRUMENT TONE AND PERFORMAN

LOW LEVEL MED. LEVEL		CONTRACT NO. 68-01-6762 HIGH LEVEL			
WATER	SOIL/SED.		OTHER (Spec	:1fy)	
D	ate: <u>B/19/83</u> DFTPP File Name:	DH8308191	9/4 Analyst:	65	9
Mass	DFTPP Ion Abundance Criteria		% Relative	Abundanc	<u>:e</u>
51	30 - 60 percent of mass 198	56,09		<del></del>	
68	less than 2 percent of mass 69	0.2	- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1-		
70	less than 2 percent of mass 69				
127	40 - 60 percent of mass 198	47.47			
197	less than 1 percent of mass 198	0.93			
198	base peak, 100 percent	100.00			
199	5 - 9 per cent of mass 198	7.02			
275	10 - 30 percent of mass 198	21.10		·	
365	greater than 1 percent of mass 198	2.45	. 1		
441	present but less mass than 443	11.14			
442	greater than 40 percent of mass 198	72.36			
443	17 - 23 percent of mass 442	14.38			23.)*
DFTP	P and BFB Performance Results:				
		e reviewed an	d found to be	within t	he specified
}	criteria.	BP		8/1	9/83
1		Initials		Da	ite
	Deviations Date/Time/Instrument File Number	Compound		uired undance	Observed Abundance
				<del></del>	
	:			<del></del>	
		Init	ials		Date
Comme	nts:	D Area 2	66		
Benzio Area	chlorophenol Response Factor = Area dine Detectable	188 X 50	- 0.1		
	ure in ( ) is % of mass 442	,	RECEIVE	D OCT 2	3 1983

SEMI-VOLATILE INSTRUMENT TUNE AND PERFORMANCE					
CASE	NO. 1667 CONTRACTOR Mead C	ompuChem	CONTRAC	T NO. 68-01-	5762
LOW L	EVEL MED. LEVEL SOIL/SED.		HIGH LE	VEL Specify)	
MAIEN				Specify	
D	ate: 8/23 DFTPP File Name: Shift: C	DH 8308 L3C	Analys	it: 616	
<b>M</b>	DFTPP		, W Dala		
Mass	Ion Abundance Criteria		* Kela	tive Abundan	<u>ce</u>
51	30 - 60 percent of mass 198	53			
68	less than 2 percent of mass 69	LZ			
70	less than 2 percent of mass 69	42			
127	40 - 60 percent of mass 198	54			
197	less than 1 percent of mass 198	21			
198	base peak, 100 percent	10.0			
199	5 - 9 per cent of mass 198				
275	10 - 30 percent of mass 198	22			
365	greater than 1 percent of mass 198	7)	_ `*		
441	present but less mass than 443	L443			
442	greater than 40 percent of mass 198	740			
443	17 - 23 percent of mass 442	13.75			( Zp )*
DFTP	P and BFB Performance Results:		<del> </del>	<del> </del>	
	The DFTPP performance results wer	ns hewelver e	d found t	n he within	the specified
1	criteria.		. ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	d	37
		Initials		<u> </u>	ate
	7 Deviations			Required	Observed
	Date/Time/Instrument File Number	Compound	m/z	Abundance	Abundance
		-			
}	:				
		Init	ials		Date
Comme					
Penta	chlorophenol Response Factor = Area	$\frac{0}{188} \times \frac{\text{Area } 2}{50}$	<u>···</u>	u. <del>)</del>	
Benzi	dine Detectable 🔀 Yes 🔲 No	30		<u></u>	2 E 4002
	(Counts) 40 ng D10 Anthracene = ५५° Butyl Phthalate Saturated ☐ Yes	No No	KE	CEIVED OCT	Z 3 1983
* Fig	ure in ( ) is % of mass 442	<b>V</b>			

FOM F	CONTRACTOR Mead C MED. LEVEL SOIL/SED.		HIGH LE	T NO. <u>68-01-(</u> VEL (Spec1fy)	
D	DFTPP File Name: ate: <u>&amp;-いなる</u> Shift:	DH\$30812B1	Analys	it: 727	•
Mass	DFTPP Ion Abundance Criteria		% Rela	ntive Abundan	<u>:e</u>
51	30 - 60 percent of mass 198	5998			
68	less than 2 percent of mass 69	c.190			
70	less than 2 percent of mass 69	C.1%		<del></del>	
127	40 - 60 percent of mass 198	55%	<del></del>		<del></del>
197	less than 1 percent of mass 198	L.190			<u> </u>
198	base peak, 100 percent	100%	<del></del>		<del></del>
199	5 - 9 per cent of mass 198	7.7%			•
275	10 - 30 percent of mass 198	24%			•
365	greater than 1 percent of mass 198	3,33	_ · <b></b>		······································
441	present but less mass than 443	11%			······
442	greater than 40 percent of mass 198	68%			····
443	17 - 23 percent of mass 442	13%		·	( 19%-)*
DETP	P and BFB Performance Results:	····			<u></u>
	The DFTPP performance results wer criteria.	e reviewed an	d found 1	to be within	the specified
		Initials	<del></del>	D	ate
	Deviations Date/Time/Instrument File Number	Compound	m/z	Required Abundance	Observed Abundance
		·	·		
	:	-			
1		Init	ials	·	Date
Comme	nts:	O Area 2	66	~]	
Pentachlorophenol Response Factor = Area 188 x 50 = .08  Benzidine Detectable Yes No Area (Counts) 40 ng D10 Anthracene = 33243 Di-N-Butyl Phthalate Saturated Yes No PECEIVED 0CT 2 5 1983  * Figure in ( ) is % of mass 442					
• •					

CASE LOW L WATER	EVEL MED. LEVEL SOIL/SED.		HIGH LEV OTHER (S	pecify)	
D	DFTPP File Name: ate: 8/23/83 Shift:	DH.8308231	4/6 Analyst	: <u>53</u> /	
Mass	DFTPP Ion Abundance Criteria		% Relat	ive Abundan	<u>ce</u>
51	30 - 60 percent of mass 198		HO		
68	less than 2 percent of mass 69	_	_		
70	less than 2 percent of mass 69	_			
127	40 - 60 percent of mass 198	, 5	7.		
197	less than 1 percent of mass 198	-			
198	base peak, 100 percent	. 100	0		
199	5 - 9 per cent of mass 198	6			
275	10 - 30 percent of mass 198	1.	8		
365	greater than 1 percent of mass 198	/	.0		
441	present but less mass than 443		7		
442	greater than 40 percent of mass 198		54,86		·
443	17 - 23 percent of mass 442		9.57.		(17.44)*
DFTP	P and BFB Performance Results:				
V	The DFTPP performance results were	e reviewed and	d found to	be within	the specified
	criteria.	Ac Initials		8/	<i>183/83.</i> até
•		Initials		10	até
	Deviations Date/Time/Instrument File Number	Compound	m/z	Required Abundance	Observed Abundance
Ì	:				
		Init	ials		Date
Comme					
Penta	4 chlorophenol Response Factor = Area		0.0	9	
Benzi	dine Detectable XI Yes No		·.	<del>_</del>	
Area Di-N-	(Counts) 40 ng D10 Anthracene = 397 Butyl Phthalate Saturated Yes	No No	DEC!	FIVED OCT	5 1983
* Fig	ure in ( ) is % of mass 442		1100		

JR

CASE		ompuChem		r NO. 68-01-	6762
LOW L WATER			HIGH LEV	VEL Specify)	
MAIER				Specify	
D	ate: <u>%-25-83</u> Shift: <u>C</u>	<u>PH \$30825C/4</u>	Analys	: <u> </u>	
Mass	DFTPP Ion Abundance Criteria	•	% Relat	tive Abundan	ce
51	30 - 60 percent of mass 198	57			
68	less than 2 percent of mass 69	0		·	
70	less than 2 percent of mass 69	0			
127	40 - 60 percent of mass 198	56	<del></del>		
197	less than 1 percent of mass 198	0			
198	base peak, 100 percent	· 100°			
199	5 - 9 per cent of mass 198	6.7			
275	10 - 30 percent of mass 198	18			
365	greater than 1 percent of mass 198	2	٠٠		
441	present but less mass than 443	5.5			
442	greater than 40 percent of mass 198	43			
443	17 - 23 percent of mass 442	7.4			(17.)*
DFTP	P and BFB Performance Results:				
	The DFTPP performance results wer criteria.	e reviewed and	found to	o be within	the specified
1	•	Initials		D	ate
	7 Deviations			Required	Observed
	Date/Time/Instrument File Number	Compound	m/z	Abundance	Abundance
	<u> </u>	Initia	als	· · · · · · · · · · · · · · · · · · ·	Date
Comme		0 Area 26	6	7	
Benzi Area	chlorophenol Response Factor = Area dine Detectable  Yes  No (Counts) 40 ng D10 Anthracene = Butyl Phthalate Saturated  Yes		-	L : CEIVED OCT	2 5 1988
_	ure in ( ) is % of mass 442	_	/ t <b>t</b>		

VOLATILE INSTRUMENT TUNE AND PERFORMANCE 5801-E3784

CASE LOW LI WATER	EVEL MED. LEVEL	HIGH LEVEL				
	ate: カンカタフ BFB File Name: 化 Shift:		5	: 714		
Mass	BFB Ion Abundance Criteria		% Relat	ive Abundan	<u>ce</u>	
50	15 - 40 percent of mass 95	24				
75	30 - 60 percent of mass 95	47	· · · · · · · · · · · · · · · · · · ·			
95	base peak, 100 percent	100				
<b>9</b> 6	5 - 9 percent of mass 95	8.9				
173	less than 2 percent of mass 174	0				
174	greater than 50 percent of mass 95	77				
175	5 - 9 percent of mass 194	5.0		(	6.5)1	
176	greater than 95 percent, but less than 101 percent of 174	77				
177	5 - 9 percent of mass 176	5,2		(	6·8 )2	
	The BFB performance results were criteria.	reviewed and			e specified	
	Deviations Date/Time/Instrument File Number			Required Abundance	<b>Observed</b>	
		Init	ials	D	ate	
Comme	nts:					
1 Valu	ue in ( ) is % of mass 174			IVED OCT 2	E 4092	

•				((# 1906	
	VOLATILE INSTR	RUMENT TUNE AND	PERFORMAN	ICE 5907	-6314U -63743
LOW L	NO. 1887 CONTRACTOR Mead Contr		HIGH LEVE	NO. 68-01-	6762 5427 R-831
D	Date: 7/29/63 BFB File Name:	BF830728C05	Analyst:	714	
Mass	BFB Ion Abundance Criteria		% Relati	ve Abundan	<u>ce</u>
50	15 - 40 percent of mass 95	26			
75	? 30 - 60 percent of mass 95	48			
<b>9</b> 5	base peak, 100 percent	100			
96	5 - 9 percent of mass 95	8.6		<u> </u>	
173	less than 2 percent of mass 174	0			
174	greater than 50 percent of mass 95	84			
175	5 - 9 percent of mass 194	6.5		(_	7.7 11
176	greater than 95 percent, but less than 101 percent of 174	84			
177	5 - 9 percent of mass 176	5,7		(_	6,8 )2
BFB	Performance Results:			··	
	The BFB performance results were criteria.	reviewed and f	ound to be	within th	e specified
	•	Initials		D	ate
	Deviations Date/Time/Instrument File Number	Compound		Required Abundance	Observed Abundance
Ommo	pt c •	Initi	als	D	ate
omme	1111.3				
		<del></del>			
				<del></del>	

 1  Value in ( ) is % of mass 174

2 Value in ( ) is % of mass 176

OFFIVED OCT 2 5 1983

CÀSE LOW L WATER	NO. 1887 CONTRACTOR Mead Comment of the comment of	ompuChem	HIGH LE	T NO. <u>68-01-</u> VEL Specify)	
	ate: 7/28/83 BFB File Name:	BF830728,		t: 633	
Mass	BFB Ion Abundance Criteria			tive Abundan	<u>ce</u>
50	15 - 40 percent of mass 95		23		
75	30 - 60 percent of mass 95		49		
95	base peak, 100 percent		100	<del></del>	
96	5 - 9 percent of mass 95		84	· ·	<del></del>
173	less than 2 percent of mass 174		-28		
174	greater than 50 percent of mass 95		82		
175	5 - 9 percent of mass 194		5.9	(	7.2 11_
176	greater than 95 percent, but less than 101 percent of 174		81		
177	5 - 9 percent of mass 176	·	5.8	(_	7.2 12
BFB	Performance Results:	<del></del>			
	The BFB performance results were a criteria.	reviewed and 1	found to	be within th	e specified
	•	Initials	<del> </del>	D	ate
	Deviations Date/Time/Instrument File Number	Compound	m/z_	Required Abundance	Observed Abundance
Comme	nts:	Initi	als	D	ate
Johane					
1 Val	ue in ( ) is % of mass 174				
2 v.1	up in / \ ic % of macc 176		REC	CEIVED OCT	2 5 1983

4-2012/2013

FORM VII

Revision Date 7/83 JRT

CASE NO. CONTRACTOR Mead Co			CompuChem	ompuchem CONTRACT NO. 68-01-6762 HIGH LEVEL					
WATER SOIL/SED.				OTHER (Specify)					
Đ	ete: 8/29/83	BFB File Name: Shift:	BF830829/A	// Analy	st: <u>633</u>				
Mass	Ion Abundance Cri	teria		% Re1	ative Abundan	ce			
50	15 - 40 percent o	f mass 95	<u>.                                    </u>		2				
75	30 - 60 percent o	of mass 95			11				
95	base peak, 100 pe	ercent		/(	)0				
96	5 - 9 percent of	mass 95			7.4				
173	less than 2 perce	ent of mass 174	··		2%				
174	greater than 50 p	ercent of mass 95	5		66	<del></del>			
175	5 - 9 percent of	mass 194			4.5 1	6.8 1			
176	greater than 95 p less than 101 per				65				
177	5 - 9 percent of	mass 176			5.0 1	77 12			
BFB	Performance Result	<u>s:</u>							
	The BFB perform criteria.	nance <b>re</b> sults were	e reviewed and	found to	be within th	e specified			
İ	•	•	Initials	<u> </u>	D	ate			
	Deviations Date/Time/Instr	ument File Numbe	er Compound	m/z	Required Abundance	Observed Abundance			
				· · · · · · · · · · · · · · · · · · ·					
			Infi	ials		ate			
Comme	nts:								
	<del>-</del>								
1 Val	ue in ( ) is	% of mass 174		0.	~~~~~	<b>.</b>			
2 Value in ( ) is % of mass 176				PECEIVED 007 2 5 1983					

	ue in ( ) is % of mass 174 ue in ( ) is % of mass 176		RE	CEIVED OCT	2 5 1983
omme	ents:	****			
			tials		ate
	Deviations Date/Time/Instrument File Number	Compound	m/z	Required Abundance	Observed Abundance
A	_	Initial	S		ate
	The BFB performance results were recriteria.	reviewed and	found to	be within th	e specified
	Performance Results:				
.77	5 - 9 percent of mass 176	· · · · · · · · · · · · · · · · · · ·	5.0	(	6.9 12
76	greater than 95 percent, but less than 101 percent of 174		72		
75	5 - 9 percent of mass 194		5.4	(	7.4 )1
74	greater than 50 percent of mass 95		73		
.73	less than 2 percent of mass 174		<b>~</b> کوہ/		
96	5 - 9 percent of mass 95		8.3		
95	base peak, 100 percent		100		
<del>75</del>	30 - 60 percent of mass 95		45		
<u>1ass</u> 50	Ion Abundance Criteria  15 - 40 percent of mass 95		25 Re18	ative Abundan	<u>ce</u>
	BFB		_		
Ω	Date: $\frac{8/2/83}{}$ Shift: $A$	BF830802/	All Analys	st: <u>633</u>	
ATER	SOIL/SED.			(Specify)	
ASE Owl	NO. 1887 CONTRACTOR Mead Co	ompuChem	CONTRAC HIGH LI	CT NO. <u>68-01-</u> EVEL	6762

CASE NO. CONTRACTOR Mead Co		CompuChem	CONTRACT NO. HIGH LEVEL	0. 68-01-6762		
WATER	SOIL/SED.		OTHER (Spec	fy)		
D	ate: 8/2/8) BFB File Name:	8f830802811	Analyst:	8/2/8)		
Mass	BFB Ion Abundance Criteria		% Relative	Abundance	<u> </u>	
50	15 - 40 percent of mass 95	24.50				
75	30 - 60 percent of mass 95	45.43				
95	base peak, 100 percent	100.00				
96	5 - 9 percent of mass 95	8.79				
173	less than 2 percent of mass 174	-0-	<del></del>		<del></del>	
174	greater than 50 percent of mass 95	75.50				
175	5 - 9 percent of mass 194	5.17		(	6.8 p1	
176	greater than 95 percent, but less than 101 percent of 174	73.24				
177	5 - 9 percent of mass 176	4.62		( (	6.3 12	
BFB	Performance Results:  The BFB performance results were criteria.	reviewed and fo	ound to be w	ithin the	specified	
1		Initials	e			
	Deviations Date/Time/Instrument File Number	Compound		uired ndance	Observed Abundance	
		Initi	als	Da	te	
Comme	nts:			···		
	ue in ( ) is % of mass 174		RECFI	VED OCT	2 5 1983	
2 Val	ue in ( ) is % of mass 176					

VOLATILE	INSTRUMENT	TUNE	AND	PERF	ORMANCI

CASE LOW L WATER	NO. 1887 CONTRACTOR Mead C EVEL MED. LEVEL SOIL/SED.	ompuChem	HIGH LE	T NO. <u>68-01-</u> VEL Specify)	6762
D	ate: 8/3/87 BFB File Name: 6	BF830103C y	Analys	t: 714	
Mass	BFB Ion Abundance Criteria		% Rela	tive Abundan	ce
50	15 - 40 percent of mass 95	26			
75	30 - 60 percent of mass 95	48			
95	base peak, 100 percent	100			
96	5 - 9 percent of mass 95	8,5			
173	less than 2 percent of mass 174	0			
174	greater than 50 percent of mass 95	72			
175	5 - 9 percent of mass 174	5،٦		(	8.0 1
176	greater than 95 percent, but less than 101 percent of 174	.72			
177	5 - 9 percent of mass 176	ŝ.o <b>∢</b>		(	7.0 12
REB	Performance Results:  The BFB performance results were criteria.	reviewed and 1	found to		e specified
	Deviations Date/Time/Instrument File Number		m/z	Required	Observed Abundance
Comme	nts:	Initi	ials	D	ate
Johnsto		·	<del></del>		
1 Val	ue in ( ) is % of mass 174		OF.	EIVED OCT	2 5 1983
2 Val	ue in ( ) is % of mass 176		ME	CHACKD AND	
	EOD	M VII			